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ABSTRACT

Education graduates from the University of Central Florida who received degrees between December, 1980, and August, 1983, participated in this follow-up study evaluating their preparation for teaching. The student teaching experience was rated most highly, as was specialization preparation. Foundation courses were perceived as weaker. Of foundation topics, the most highly rated were motivating students and classroom management and discipline. Among nine elementary education subject areas, mathematics, reading, and language arts were rated most highly in instructional competence and importance. Secondary education majors rated courses within the College of Education (COE) and courses outside the COE. English and language arts had the highest rating for courses in the COE and mathematics had the highest rating for courses outside the COE. The questionnaire is appended which contained demographic information, perceptions of academic advising, and future career plans, in the last section. (JD)

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A Follow-up Study of Selected Graduates from the College of Education University of Central Florida:

Final Report
(#85-2)

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SP 030 015

PREFACE

The University of Central Florida offered classes during the 1968-1969 academic year. In its seventeen-year history, over 27,000 Bachelors degrees have been conferred by the University. Almost 20% of those undergraduate degrees were conferred on individuals who entered the classrooms of public and private schools, primarily in the Central Florida region.

Public education has been under attack by the media, politicians, and the public. A frequent target of related criticisms have been colleges of education, those organizations that prepare professionals charged with advancing the quality of instruction and student achievement. While criticism of teacher preparation has been rampant at the local, state, and national levels, not many studies have sought the opinion of teachers on the effectiveness of their preservice education. Those studies that have been conducted have themselves been criticized.

This report is an account of the findings of a follow-up study conducted with former students in ten fields of study within the College of Education, University of Central

Florida. Alumni participants were graduates from the December, 1980 to August, 1983 period.

The study is described in four chapters. Chapter I presents an introduction to the study, including brief summaries of related discussions from professional literature. These discussions focus specifically on criticism of and support for follow-up studies.

Chapter II includes a description of the procedures used in the study. Rationales are presented, for example, for participant selection. Instrumentation, data collection, and data treatment/analyses are explained.

Results of the study are presented in Chapter III, while conclusions and discussion are given in Chapter IV. Within the final chapter, the reader will be offered some insights and, admittedly, biases of the writer. The extent to which this project escaped factors related to criticims of prior studies will be elaborated upon.

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August, 1985

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The author of this report is grateful for the help of many individuals whose encouragement, assistance, and persistence were invaluable in initiation and completion of this project.

Martha Beckett, Huntsville, Alabama, played a crucial role in the initiation of the study. Her knowledge and insights during NCATE training sessions lead one to believe "there are things we need to know." Her boundless energy inspires one to feel "what we need to know is worth finding out." Commitment to standards and the ability to foster professionalism are just two of the attributes exhibited by this educator, Martha Beckett.

Patricia Manning, Director of Educational Research UCF, provided significant encouragement and assistance. Gladys Yost, secretary, Institute for Educational Research, UCF, expedited the data-collection and assisted in many valuable ways. Carol Rumph, former secretary, Department of Instructional Programs, provided extraordinary help with the preliminary report on which this document is based.

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CHAPTER I

INTRODUCTION

Follow-up studies serve as one communication device with which to obtain graduates' perceptions of professional preparation effectiveness. National Council for Accreditation of Teacher Education (NCATE) standards, in fact, require a follow-up study as part of the teacher education accreditation process. Although these follow-up studies are widely used by Colleges of Education and are explicitly required in NCATE's evaluation, they have been criticized in the professional literature.

Criticisms of Follow-up Studies

Katz et al. (1981) presented some of the most detailed critical analyses of follow-up studies. These researchers reported that 58% of the teacher education programs studied by NCATE during 1979 were cited for violating the follow-up standard. In order to examine reasons for this situation, the writers reviewed 26 data-based reports of follow-up studies and reported their findings under three major categories: 1) sample representativeness, 2) recommendations, and 3) usefulness and application of information.

Sample Representativeness

Katz and his colleagues reported that a median response rate of 67% was obtained for the 26 studies. Of those individuals returning questionnaires across all studies, approximately 60% of the respondents indicated current employment as teachers. It appeared, therefore, that those who returned the instruments disproportionately represented graduates who were teaching. No effort was made in the studies to discern the degree of sampling bias created by this fact. One may logically ask if the graduates' perceptions of their preparation for teaching was affected by their employment in a field other than education. Katz and colleagues do not deal with this issue.

Recommendations

Katz and his collaborators identified 70 recommendations in 15 studies; the remaining 11 studies did not include recommendations. Through content analysis, five broad categories were developed for the 70 identified recommendations. The largest categories were 1) recommendations for changes in specific skills, topics, competencies, and understandings covered in teacher education program courses (30%) and 2) vague, general recommendations (32%). One of the most glaring conclusions reported in the Katz review was that none of the 33 specific recommendations (sufficiently specific for implementation) suggested that a topic, a course, an

activity, or an emphasis be deleted from teacher education programs. Rather, each recommendation proposed that a course, a topic, an activity, or increased emphasis be included in the programs of study.

Information Usefulness and Application

The studies' credibility was deemed poor; this was based on the questionable representativeness of the samples and on the bland, general recommendations that resulted. This low credibility subsequently reduced the applicability of the studies' results. Additionally, anecdotal comments were perceived as general, failed to relate to specific problems, and provided information that was of little value. These factors, and others, greatly diminished the impact that the follow-up studies could make on their respective teacher education programs.

Follow-up Studies Support

Adams et al. (1981) responded to the criticisms of Katz and colleagues. While the Adams group took issue with many of the points in the earlier article, they accepted other major concerns. In spite of the problems and weaknesses in follow-up studies, they asserted, these efforts were worthwhile. They stressed that much was to be done in developing strong teacher education programs and in strengthening strong programs and that follow-up studies can play an important role in this program improvement.

Communication was the key, Adams and his fellow-writers suggested; instead of discounting follow-up study data, teacher educators have a responsibility to use this information and other communication sources in a manner that results in better prepared teachers and in providing improved services to graduates. Communication must be viewed as a means to an end and utilized in meaningful ways. "The marriage of program evaluation with program development must occur" (p. 24). The Adams group further presented the view that program evaluation was most validly judged within a broad social context; narrow research constraints per se do not necessarily negate follow-up studies' values for teacher education professionals.

Further support for follow-up studies was provided by Schwanke (1980) who described nine reports from the ERIC system that dealt with teacher education program follow-up studies. Schwanke introduced the annotated bibliography with tne judgement that graduates' recommendations "are the best sources of information for improving" professional preparation.

UCF Follow-up Study

With these criticisms in mind, a follow-up study was conducted at the University of Central Florida. Impetus for the project originated from varied sources. Participation by the researcher in an NCATE training workshop had involved review and critique of follow-up

study data from another institution. These data appeared to be valuable in both diagnostic and prognostic aspects. The institution from which they emanated is in a state that had, like Florida, developed legislatively-mandated competency standards, testing, and/or accountability for teacher education programs. The follow-up study utilized in the NCATE training sessions appeared to be a viable link between graduates' perceived preparedness levels and the degree of competence and preparation specified by state law or policy.

In addition, recent criticisms of teacher education programs and proposed improvements have been numerous. Media coverage and political impact of reports negative in their assessment and outlook have profoundly affected teacher educators' role and status. In spite of the fact that skeptics might characterize some reports as the "gored ox" genre (see Excellence in Our Schools: Teacher Education,An Action Plan by National Education Association, 1982) in their proposed solutions, it was accepted that past practices and problems in teacher education have contributed, in part, to the general decline in the public's opinion of and esteem for education as a profession.

The alleged present negative status of teacher education has been widely disseminated through reports, such as, The Making of a Teacher: A Report on Teacher Education and Certification by Feistritzer (1984).

In the preface of this work, Feistritzer stated "College education courses have been called everything from 'Mickey Mouse' to 'a waste of time'" (p.ix). She did go on to say that "Hard data about teacher education and certification to substantiate or counter these claims are scarce" (p. ix).

Linda Darling-Hammond presented a decidedly dismal and extremely pessimistic future for education in Beyond the Commission Reports: The Coming Crisis in Teaching (1984). This report projected a continuing decline in education's professionalism based primarily on factors related, both directly and indirectly, to teacher education. In addition to having severe concerns about the calibre of individuals attracted to teaching careers, Darling-Hammond presented some causal factors, underlying the current situation, that she feels must be recognized in order that reforms be undertaken with any hope of success.

These issues, concerns, and public perceptions of teacher education, along with calls for improved quality of instruction in student assessment reports (see, for example, National Commission on Excellence in Education, 1982), pointed out the need for Colleges of Education to examine their teacher preparation programs, with whatever means are at their disposal and with whatever data are obtainable. Graduates' opinions of their respective teacher education professional programs were considered by the writer to be a valid source for program evaluation and,

therefore, were solicited as the data collection target of this project.

Subsequent sections of this report present procedures descriptions, data analyses results, and conclusions and discussions. Brief rationales on which some procedures were based are also given. Additionally, the reader will encounter numerous cautions relative to results' interpretations and to the researcher's opinions and conclusions.

CHAPTER II

PROCEDURES

Procedural operations were prescribed prior to data collection for this follow-up study of University of Central Florida education graduates. Selection of program graduates to be surveyed and other procedural decisions evolved from the following: 1) practices reported in related professional literature, 2) recommendations arising from National Council for Accreditation of Teacher Education (NCATE) standards, 3) distribution of program majors within the University of Central Florida's College of Education departments, 4) past reorganization within the College of Education, and 5) specific interests of the researcher.

Participants

The University of Central Florida awarded 23,377 Bachelors Degrees through Fall Semester, 1983. Of these degrees, 4,513 were conferred upon College of Education majors within different fields. While the professional study of education characterized each College of Education graduates' program, this common quality was one of few factors shared by these individuals. Their respective programs of study across and within specific fields varied greatly during the univer-

sity's sixteen-year history. Influences affecting programs included academic-year calendar revisions, College of Education departmental reorganization, and numerous legislatively-mandated program alterations.

Graduation Date Parameters

College of Education graduates receiving degrees December, 1980 through August, 1983 shared more consistent pre-service experiences with each other than they shared with their peers who had graduated during earlier years. The academic-year calendar, for example, was based on the semester system during this entire period.

Also considered in selecting potential participants was respondents' length of possible teaching experience. It was thought that a more realistic perspective of preparation effectiveness would follow a teacher's experience of one school year or longer. This latter criterion for participant selection excluded, from the potential subject pool, graduates from Fall Semester, 1983 and later terms. For these two reasons, pre-service education program consistency and length of possible teaching experience, selected graduates from the period December, 1980 through August, 1983 were identified as potential study questionnaire recipients.

Undergraduate Majors

Alumni from ten undergraduate education majors comprised the surveyed group. These areas of study currently are offered by University of Central Florida's Department of Instructional Programs. These graduates include individuals

who had received approximately 75% of the education degrees conferred through Spring term, 1983.

Participants included former students preparing for professional service in diverse instructional settings and curricular specialties. These selected fields of study included the following education majors: 1) elementary, 2) business, 3) English/language arts, 4) foreign language, 5) mathematics, 6) social science, 7) science, 8) speech, 9) vocational/technical, and 10) visual arts.

The university's Office of Alumni Relations provided a list of graduates based on the program majors and graduation dates previously described. The participant pool numbered 667. The participant/major list was informally reviewed by selected academic advisors from within the Department of Instructional Programs and judged to be accurate. Graduates' addresses were then obtained.

Instrumentation

An original instrument was developed for this follow-up study of selected education graduates (see Appendix). This questionnaire was constructed using relevant documents, instruments, and recommendations from professional literature and from teacher education colleagues.

Professional education preparation at the University of Central Florida encompasses three distinct, although not discrete, areas of study. Teaching competencies and knowledge are gained from study within three areas,

1) foundations for teaching, 2) specialized methods courses, and 3) field-based student teaching.

Objectives and activities overlap, to some extent, among these three areas. Instructional planning, for example, although initially taught in a teaching foundations course, is reinforced in most specialized methods courses. In spite of the acknowledged overlap among courses, the survey instrument was developed utilizing these three curriculum areas, i.e., foundations for teaching, specialization, and student teaching.

Foundations for Teaching

Items describing topics of study resulted from a review of the university catalog course descriptions. Eighteen topics were listed on the questionnaire's first section and represented course objectives/descriptions from courses offered within the foundations for teaching area. Respondents were asked to report their perceptions of each topic on two dimensions, 1) the extent of their knowledge or skill gained as a result of their preparation within the University of Central Florida's College of Education and 2) the usefulness of that particular knowledge or skill in their teaching.

Examples of questionnaire items included the following: 1) the relationship between human growth and development and classroom learning, 2) different theoretical models for understanding student behavior and improving classroom teaching, and 3) the nature of the learning process. Parti-

cipants could express their opinions on a five-option numeric response scale that was provided on the two dimensions of each particular topic. Verbal equivalents for the numeral response options were provided in an explanatory paragraph immediately preceding the questionnaire items. The numerical options on each dimension ranged from one through five and represented, respectively, perceptions from very weak, very negative, or very unimportant to very strong, very positive, or very important.

Specialization

Assessment of elementary education specialization course effectiveness had a format similar to that of teaching foundations courses. However, a third dimension within this section allowed graduates to rate the extent of their personal knowledge or skill for each of the subject areas. Again, an introductory paragraph provided directions to tne respondents and included a reminder of the numeric response scale values. Nine subject areas were listed, corresponding to the nine course areas required for elementary education majors.

Most subject areas assessed within this section of the questionnaire required one course each. This fact did not apply, however, to mathematics or reading, for each of these subjects required two courses each. Other specialization courses assessed for elementary education graduates were art, health and physical education, literature for children, language arts, music, science, and social

studies. Alumni were asked to rate each subject on the following dimensions: 1) personal knowledge or abilities, 2) instructional abilities or competencies, and 3) the importance of each subject area's course work, based on teaching responsibilities. On dimension 1) and 2) (i.e., personal knowledge/abilities and instructional abilities/competencies) graduates were asked to base their ratings on these dimensions as they had existed "at the conclusion of your teacher education program." Tnis stipulation was intended to preclude assessing abilities respondents may have gained as a result of their teaching experiences, school district staff development activities, or involvement in graduate programs of study.

Secondary and kindergarten-grade 12 (K-12) majors' specialization assessment differed greatly from that of the elementary education majors. Course variety within these programs led to development of a simplified assessment procedure consisting of four items. Alumni were requested to give their perceptions of required specialization courses 1) offered in the College of Education and 2) offered outside the College of Education. Two additional items elicited graduates' written responses; these items requested that participants list courses offered outside the College of Education 1) that were exceptionally beneficial or 2) that were of little or no value in their preparation for teaching.

A final open-ended item related to all education graduates. They were asked to make any recommendations they

felt would improve the specialization area of their respective academic programs. Responses from this item will not be described in the results section of the report, but will be included in the conclusions/discussion section.

Student Teaching

Items within the third questionnaire section asked graduates to evaluate their student teaching. For both the junior year and the senior year student teaching experiences, respondents were asked to provide their opinions on 1) the university coordinator, 2) the supervising teacher, 3) overall evaluation of the experience, and 4) appropriateness of length of time required for the student teaching experience.

Alumni were asked to rate university coordinators and supervising teachers on the degree to which the graduates perceived each to have been 1) available, 2) knowledgeable, and 3) helpful. In addition, for the junior year student teaching, respondents rated the effectiveness of the university/school coordination.

Overview

The fourth, and final, section of the instrument contained items only peripherally related to the study's goals. While data obtained were of interest to the researcher and focused on teacher education issues addressed in other studies, they did not focus on this particular study's primary project question: How do selected University of Central Florida education graduates rate their professional preparation? Results from this section of the questionnaire,

therefore, will be discussed less extensively and only to the extent that they relate to the interpretation of more specific project questions.

Data Collection

The questionnaire (see Appendix) was mailed to participants November 10, 1984. An introductory paragraph gave the study's purpose and a request that the completed questionnaire be returned by "the 25th of the current month."

Participants returned 133 questionnaires for a 20% return rate. The United States Postal Service returned an additional 7% of the instruments as undeliverable for varied reasons, primarily "forwarding order expired." It is assumed that these undeliverable instruments were disproportionately directed to graduates within the earlier years of the graduation date parameters. This assumption is based on postal service policy that mail forwarding ceases after a two-year period.

Responses were received through December and into January, 1985. Instruments received after January 4th were not used in this report's data analyses and are not counted among the 20% returned questionnaires.

Data Treatment and Analyses

Returned questionnaires were coded for data storage, retrieval, treatment, and analyses. Preliminary examination required 99 coded variables. (There were three redundancies.) Response options using the numeric scale retained their respective values. The numeral 1, for example, reflected

the most negative perception, and the numeral 5 reflected the most positive perception. Nominal data, e.g., majors and verbal descriptors, were assigned numeric values.

Arithmetic means and standard deviations were calculated for data yielded by the five-option (numeric) response scale. For the verbal responses, medians and/or frequency counts were obtained; in addition, the means and standard deviations were calculated for a few of these item types. Specialization courses also were ranked from high (strong) to low (weak) on two assessed dimensions, 1) instructional competence and 2) importance.

On both the foundations for teaching topics (for all participants) and elementary education course specialization courses an additional measure was calculated. The mean of the competence dimension responses and the mean of the importance dimension responses were compared. Based on the inference that an item's importance dimension intensity (i.e., strength on the scale) indicated the degree of need for that knowledge or skill, this comparison will be described in the results as knowledge/need agreement. This examination of the data was interpreted as an indication of teachers' amount of knowledge or skill as they related to what teachers feel they need to know in performance of their teaching responsibilities.

CHAPTER III

RESULTS

Results of data analyses are presented in this section of the report. These findings are discussed by questionnaire sections, that is, foundations for teaching, specialization, student teaching, and overview. (See Appendix for questionnaire.)

Foundations for Teaching

The numbers of participants responding to the foundations for teaching items ranged from 127 to 129. This difference in respondent numbers for particular items resulted from the fact that, for unknown reasons, respondents omitted items, although infrequently.

Knowledge or Skill Gained

Graduates perceived most topics somewhat favorably to the extent that knowledge or skills were gained. (See Table 1.) Sixteen of the 18 items had knowledge response means exceeding 3.00, mid-point of the scale. One could infer, therefore, that these 16 items and the courses from which they were chosen were judged positively, albeit slightly for some items.

TABLE 1

Foundations for Teaching
Knowledge Gained

	Topic	$\bar{x}$	SD	Rank
1.	Human growth/development and classroom learning	3.88	.86	4
2.	Models for understanding student behavior and improving teaching	3.67	.96	9
3.	Learning process	3.82	.83	5
4.	Motivating students	3.70	1.13	8
5.	Classroom management and discipline	3.36	1.26	12
6.	Ethical behavior of teachers	3.65	1.12	10
7.	Exceptional students and their special needs	3.12	1.12	14
8.	Rights and responsibilities of teachers	3.43	1.12	11
9.	Effective parent/teacher communication	3.10	1.07	15
10.	School organization	2.91	1.10	17
11.	Effective reading in the content areas	3.71	1.06	7
12.	Media resources	4.07	.94	3
13.	Instructional planning	4.10	.97	2
14.	Learning objectives	4.33	.79	1
15.	Tests of student progress	3.74	1.03	6
16.	Using computers	not reported		
17.	Schools and society	3.20	1.10	13
18.	Value-patterns of social-economic classes	3.02	1.19	16

Scale: 1-5 (very negative - very positive)

Three items, however, received knowledge response means greater than 4.00. Graduates judged most positively the knowledge or skills obtained relative to 1) learning objectives, 2) instructional planning, and 3) media resources, listed in order of decreasing strength. Only one item from the teaching foundations section, school organization patterns, received a response mean below 3.00. Responses for one topic, using computers, were not analyzed. A course on classroom computer use was developed and required mid-way through the graduation dates of the surveyed graduates. Not knowing which respondents had had the course, it was thought inappropriate to analyze the obtained responses.

Variability of responses is indicated by the standard deviation (SD) calculated for each item. Six of the items yielded standard deviations below 1.00 and included the three items judged strongest in the knowledge dimension. These three items were 1) identifying learning objectives, SD = .79; 2) media resources, SD =.94; and 3) intructional planning, SD = .9.

Table 1 shows the ranking of each topic on the knowledge gained. It should be noted that the rankings range from 1 (strongest in knowledge or skills gained) to 17 (weakest in knowledge or skills gained). Due to omission of the item related to computer use, there is no 18th position.

Usefulness of Knowledge or Skills

This usefulness dimension was interpreted to be an indicator of how much each particular knowledge or skill

item was needed. In subsequent discussions, when results are reported on the level or intensity of need, that need is inferred from data obtained from the usefulness or importance dimension of the questionnaire.

Five items received response means greater than 4.00. These were, in order of decreasing strength, 1) motivating students, 2) classroom management and discipline, 3) instructional planning, 4) media resources, and 5) learning objectives.

Table 2 presents the results for the foundations topics' usefulness. All items received response means above 3.00, including the item ranked least important, school organization patterns. Variability among respondents' judgments was determined by obtained standard deviations. Three items yielded standard deviations smaller than 1.00 and included two of the topics judged most important in teachers' preparation. These two consistently important knowledge or skills were 1) media resources, $\underline{SD}$ = .88 and 2) instructional planning, $\underline{SD}$ = .98.

Table 2 also shows the perceived usefulness ranking of the foundations for teaching topics, with 1 indicating topic perceived as most useful and 17 indicating topic perceived as least useful. It should be noted that the item responses related to classroom computer use were not used to obtain mean and standard deviation and the item is not included in the ranking.

TABLE 2

Foundations for Teaching
Usefulness of Knowledge/skills

	Topic	$\bar{x}$	SD	Rank
1.	Human growth/development and classroom learning	3.94	1.11	7
2.	Models for understanding student behavior and improving teaching	3.74	1.14	13
3.	Learning process	3.87	1.01	10
4.	Motivating students	4.32	.97	1
5.	Classroom management and discipline	4.24	1.15	2
6.	Ethical behavior of teachers	3.92	1.04	8
7.	Exceptional students and their special needs	3.61	1.15	14
8.	Rights and responsibilities of teachers	3.81	1.02	11(tie)
9.	Effective parent/teacher communications	3.88	1.12	9
10.	School organization	3.25	1.08	17
11.	Effective reading in the content areas	3.81	1.11	11(tie)
12.	Media resources	4.13	.88	4
13.	Instructional planning	4.22	.98	3
14.	Learning objectives	4.02	1.06	5
15.	Tests of student progress	3.99	1.00	6
16.	Using computers	not reported		
17.	Schools and society	3.44	1.12	16
18.	Value-patterns of social-economic classes	3.54	1.10	15

Scale: 1-5 (very negative - very positive)

Knowledge/need Agreement

Comparison of group responses on the knowledge gained and on the topic's usefulness yielded information interpreted as the agreement between what graduates learned and what they needed to learn. These comparisons will be reported for the group, obtained from response means, and for individual students, obtained from individual surveys.

Group comparisons. Table 3 presents the group knowledge/-need agreements for foundations of teaching topics. These agreements are based on data combined from Tables 1 and 2. The obtained means for each topic on the knowledge dimension is shown in column immediately following the topic. The obtained means for each topic on the importance dimension is shown in the next column. The three topics highest in knowledge gained and in importance are indicated with an asterisk (*) in each column.

The differences between tne means also are shown in Table 3. The larger the number preceded by the minus sign (-), the larger the difference between the group's perceived knowledge and their expressed judgment of importance for a particular topic's knowledge or skill, with the need being deemed greater than the knowledge.

The five items with the largest differences are indicated by numbers in parentheses, with (1) indicating largest difference. Similarly, increasing numbers in parentheses present decreasing difference magnitudes. The topic with the largest negative difference refers to effective classroom

TABLE 3

Foundations for Teaching
Group Know/need Agreements of Means

	Topic	Know $\bar{x}$	Need $\bar{x}$	diff.
1.	Human growth/development and classroom learning	3.88	3.94	-.06
2.	Models for understand student behavior and improving teaching	3.67	3.74	-.07
3.	Learning process	3.82	3.87	-.05
4.	Motivating students	3.07	4.32*	-.62(3)
5.	Classroom management and discipline	3.36	4.24*	-.88(1)
6.	Ethical behavior of teachers	3.65	3.92	-.27
7.	Exceptional students and their special needs	3.12	3.61	-.49(5)
8.	Rights and responsibilities of teachers	3.43	3.81	-.38
9.	Effective parent/teacher communication	3.10	3.88	-.78(2)
10.	School organization	2.91	3.25	-.34
11.	Effective reading in the content areas	3.71	3.81	-.10
12.	Media resources	4.07*	4.13	-.06
13.	Instructional planning	4.10*	4.22*	-.12
14.	Learning objectives	4.33*	4.02	.31
15.	Tests of student progress	3.74	3.99	-.25
16.	Using computers	not reported		
17.	Schools and society	3.20	3.44	-.24
18.	Value-patterns of social-economic classes	3.02	3.54	-.52(4)

* Largest means in each dimension

discipline techniques. Other topics graduates rated stronger in need than in knowledge gained included those related to parent/teacher communications, motivating students, understanding socio-economic classes, and exceptional students' needs. Only one item, in fact, yielded a positive difference in the knowledge/need agreement: Knowledge or skill in identifying learning objectives was greater for the group means than was the importance mean for the same topic.

Individual comparisons. Table 4 shows agreement for individual respondents between knowledge and importance. Following the topic is the number of scores obtained on both dimensions, for example, 129 participants answered both the knowledge and importance items for the human growth and development topic.

The column labeled Knowledge Greater (>) shows how many participants marked the knowledge dimension higher than the importance dimension for a particular item. The column labeled Usefulness Greater (>) contains similar data. The final column indicates the number of alumni who agreed on the strength of their knowledge and the usefulness of, or need for, that knowledge.

Table 5 shows the knowledge/need agreements depicted in Table 4; the relations in Table 5, however, are expressed as percentages of responding graduates. On the discipline item, for example, 7.1% of the individuals rated the knowledge dimension greater than the need dimension. Similarly, 45.2% rated the need greater, while the two dimensions

TABLE 4

Foundations for Teaching
Individuals' Know/need Agreements

	Topic	N	Know >	Need >	Dimensions Equal
1.	Human growth/development and classroom learning	129	29	36	64
2.	Models for understanding student behavior and improving teaching	129	28	31	70
3.	Learning process	127	17	24	86
4.	Motivating students	126	11	50	65
5.	Classroom management and discipline	126	9	57	60
6.	Ethical behavior of teachers	128	12	33	83
7.	Exceptional students and their special needs	128	19	44	63
8.	Rights and responsibilities of teachers	129	13	39	77
9.	Effective parent/teacher communication	128	8	55	65
10.	School organization	128	17	40	71
11.	Effective reading in the content areas	127	20	28	79
12.	Media resources	129	19	25	85
13.	Instructional planning	129	16	30	83
14.	Learning objectives	128	39	23	66
15.	Tests of student progress	128	16	35	77
16.	Using computers	not reported			
17.	Schools and society	129	18	38	73
18.	Value-patterns of social-economic classes	129	12	47	70

TABLE 5

Foundations for Teaching
Individuals' Know/need Agreements, Percentages

	Topic	Know >	Need >	Dimensions Equal
1.	Human growth/development and classroom learning	22.5	27.9	49.6
2.	Models for understanding student behavior and improving teacher	21.7	24.0	54.3
3.	Learning process	13.4	18.9	67.7
4.	Motivating students	8.7	39.7	51.6
5.	Classroom management and discipline	7.1	45.2	47.6
6.	Ethical behavior of teachers	9.4	25.8	64.8
7.	Exceptional students and their special needs	14.8	34.4	49.2
8.	Rights and responsibilities of teachers	10.1	30.2	59.7
9.	Effective parent/teacher communication	6.2	43.0	50.8
10.	School organization	13.3	31.2	55.5
11.	Effective reading in the content areas	15.7	22.0	62.2
12.	Media resources	14.7	19.4	65.9
13.	Instructional planning	12.4	23.3	64.0
14.	Learning objectives	30.5	18.	51.6
15.	Tests of student progress	12.5	27.3	60.2
16.	Using computers	not reported		
17.	Schools and society	14.0	29.5	56.6
18.	Value-patterns of social-economic classes	9.3	36.4	54.3

Note. Due to rounding, total percentages per item may not equal 100.

were rated equal by the remaining 47.6% of the respondents.

Specialization Courses

The specialization course responses will be described in two parts. Elementary education majors' results will be presented, followed by the results of secondary and Kindergarten-Grade 12 (K-12) majors' responses.

Elementary Education

The number of elementary education majors responding to the specialization subject area ranged from 79 to 87 on individual items. A total of nine subject areas were assessed.

Personal abilities and instructional competence. Table 6 shows the means calculated for two of the assessed dimensions, personal knowledge/abilities and instructional competencies. Of the nine subject areas assessed, five yielded means of 4.00 or higher on both the personal knowledge and instructional competencies dimensions. No subject area mean was below 3.00, mid-point of the scale, on either of these two dimensions.

The two subjects receiving the highest means in both personal knowledge and intructional competence were mathematics and reading, with math being stronger of tne two. On the importance dimension, the same two subject areas were the strongest within the questionnaire section, with reading yielding a slightly higher mean.

TABLE 6

Elementary Education Specialization Courses

Subject	Personal Abilities $\bar{x}$	SD	Instructional Competence $\bar{x}$	SD	Rank
Art	3.59	1.13	3.45	1.22	8
Health and P.E.	3.48	.97	3.46	1.12	7
Literature for Children	4.10	1.06	4.19	1.04	5
Language Arts	4.09	.97	4.24	.84	3
Mathematics	4.24	1.00	4.30	.92	1
Music	3.27	1.33	3.30	1.23	9
Reading	4.14	.98	4.26	.88	2
Science	4.01	.99	4.13	.94	4
Social Studies	3.87	1.07	3.71	1.14	6

While the means describe the respondents' overall perceived strengths of their abilities and knowledge, variablity differed among the items' reponses. This variability is evidenced by the standard deviations obtained for the personal abilities dimensions and for the instructional competence dimension. Graduates' ratings on the instructional competence dimension were most consistent, that is, less varied, for the literature for children course, which had a standard deviation of .84. Standard deviations of 1.00 or less were calculated for reading, SD=.88; mathematics, SD=.92; and science, SD=.94.

Importance. Alumni rated the importance of each of the nine subject area courses. Table 7 presents the resulting means, standard deviations, and ranking. With the exception of music, all subject areas obtained means greater than 3.00, mid-point of the scale. Six subjects, in fact, had means greater than 4.00 on the importance dimension.

Graduates perceived reading as most important, followed in decreasing strength by mathematics, language arts, and literature for children and science (tied). Least variable, that is, most consistent alumni responses were obtained for reading followed, in order of increasing variability, by mathematics, science, and language arts.

Knowledge/need Ageement

Group comparisons. The subject areas' instructional competence means and importance means were used to derive the group knowledge/need agreements. Repeating these data

TABLE 7

Elementary Education Specialization Courses

Importance

Subject	$\bar{x}$	SD	Rank
Art	3.54	1.18	7
Health and P.E.	3.14	1.32	8
Literature for Children	4.29	1.06	4 (tie)
Language Arts	4.45	.93	3
Mathematics	4.61	.82	2
Music	2.95	1.24	9
Reading	4.67	.78	1
Science	4.29	.88	4 (tie)
Social Studies	4.00	1.05	6

from Table 7, Table 8 also presents the agreement differences. Discrepancies between need and knowledge are expressed with a negative sign when the need dimension was rated higher than the knowledge dimension. Discrepancies were greatest for mathematics, social studies, and reading and language arts (tied) when the discrepancies were negative, that is, when the need was stronger than the knowledge.

Individual comparisons. Table 9 presents the numbers of elementary education graduates who 1) had scores on both the knowledge and need (importance) dimensions, 2) rated knowledge greater, 3) rated need greater, and 4) rated the two dimensions equal for each of the subject areas. These data indicate that few alumni rated their knowledge greater than need for math or reading; each subject area had four individuals rate their instructional competence higher than the importance of that competence.

Data from Table 9 were used to calculate percentages of individuals for whom the knowledge/need comparisons were made. Table 10 shows the know/need agreements of elementary education alumni, with the comparisons expressed as percentages of respondents who rated both dimensions. Again, the math and reading subjects had need greater than knowledge for the largest percentages of graduates.

Secondary and K-12 Majors

Few secondary and K-12 majors returned the questionnaires. Results from the specialization courses area will be reported only for social studies (N=9), vocational/technical (N=7),

TABLE 8

Elementary Education Specialization Courses

Group Know/need Agreements of Means

Subject	Know >	Need >	Difference	
Art	3.45	3.54	-.09	
Health and P.E.	3.46	3.14	.32	
Literature for Children	4.19	4.29	-.10	
Language Arts	4.24	4.45	-.21	(3)
Mathematics	4.30	4.61	-.31	(1)
Music	3.30	2.95	.35	
Reading	4.46	4.67	-.21	(3)
Science	4.13	4.29	-.16	
Social Studies	3.71	4.00	-.29	(2)

TABLE 9

Elementary Education Specialization Courses

Individuals' Know/need Agreements

Subject	N	Knowledge >	Need >	Dimensions Equal
Art	78	17	22	39
Health and P.E.	75	27	13	35
Literature for Children	82	10	18	54
Language Arts	85	9	23	53
Mathematics	84	4	26	54
Music	82	31	21	30
Reading	84	4	28	52
Science	84	11	18	55
Social Studies	83	14	29	40

TABLE 10

Elementary Education Specialization Courses

Individuals' Know/need Agreements, Percentages

Subject	Knowledge Greater	Need Greater	Dimensions Equal
Art	21.8	28.2	50
Health and P.E.	36	17.3	46.7
Literature for Children	12.2	22	65.8
Language Arts	10.6	27	62.4
Mathematics	4.8	31	64.3
Music	37.8	25.6	36.6
Reading	4.8	33.3	61.9
Science	13.1	21.4	65.5
Social Studies	16.9	34.9	48.2

Note. Due to rounding, total percentages per subject area may not equal 100.

English/language arts (N=5), mathematics (N=5), and science (N=5) education majors. Other specialization majors returning the survey instruments numbered three or fewer for each of the remaining specializations. In fact, those results that are described should be interpreted with an awareness that participants were few in each of the secondary and K-12 areas that are reported.

Only two items within this section of the questionnaire yielded numerical data: These data are presented in Table 11. Overall perception of special methods courses offered by the College of Education ranged from extremely positive (mean=4.60) for English/language arts to slightly negative (mean=2.50) for social studies. With the exception of social studies, data within this category for the remaining four reported specializations were positive. Vocational/technical and business education preparation, with means of 4.33 and 4.00, respectively, could be viewed as extremely and definitely positive, as perceived by these programs' graduates.

Perception of required specialization courses outside the College of Education, again, was more positive than negative. The mathematics area received the highest mean, 4.40, while the social studies specialization courses received a mean of 3.25.

Student Teaching

The student teaching phases of the professional education programs were perceived by graduates as the most positive

TABLE 11

Specialization
Secondary and K-12 Graduates'
Perception of Courses

	In College of Education	Outside College of Education
Business (N=7)	4.00	3.50
English/language arts (N=5)	4.60	3.60
Mathematics (N=5)	3.50	4.40
Science (N=5)	3.40	4.25
Social Studies (N=9)	2.50	3.25
Vocational/technical (N=7)	4.33	4.20

experience of their preparation. (See Table 12.) Many graduates responded with the highest response option on all items and wrote supporting favorable comments. In addition to perceiving the university coordinators and supervising teachers positively, the overwhelming majority of graduates judged the length of the student teaching experiences appropriate.

University coordinators were judged to be available, knowledgeable, and helpful to a great degree. Means for the same qualities calculated for the supervising teachers were even higher. These opinions were expressed for both the junior year student teaching (JYST) and the senior year student teaching (SYST) experiences.

Graduates expressed favorable opinions of the length of the student teaching. Appropriateness of SYST time requirement was deemed more positive than was the JYST time requirement.

One measure of graduates' satisfaction with the student teaching, in addition to the means, is the obtained standard deviation. These were larger for this section of the questionnaire than for any other section. A few respondents rated the university coordinators and supervising teachers extemely low; many more graduates, however, rated them extremely high. The tendencies to respond on the extemes of the scale resulted in the large variability, as measured by the standard deviations.

TABLE 12

Student Teaching
Graduates' Perceptions

	$\bar{x}$	SD
Junior Year		
University Coordinator		
Available	3.75	1.23
Knowledgeable	3.91	1.18
Helpful	3.67	1.35
Supervising Teaching		
Available	4.25	1.08
Knowledgeable	4.16	1.12
Helpful	4.07	1.21
Coordination between concurrent course work on campus and school-based experiences	3.79	1.07
Overall Evaluation	3.87	1.00

Amount of time required for JYST was: too long N=12; appropriate N=93; too short N=9.

Senior Year		
University Coordinator		
Available	3.98	1.24
Knowledgeable	4.12	1.17
Helpful	3.98	1.36
Supervising Teaching		
Available	4.54	1.02
Knowledgeable	4.50	1.02
Helpful	4.35	1.20
Overall evaluation	4.33	.98

Amount of time required for SYST was: too long N=2; appropriate N=104; too short N=19.

Students' comments, like their responses on the scale tended to be more positive than negative. Many alumni wrote in the provided space and attached page(s) with additional comments and suggestions. Comments contained expressions of appreciation for individual university faculty, described as caring, concerned, practical, and other favorable characteristics.

Those few graduates who did comment negatively included suggestions for selection, training, and assisting supervising teachers and for more diligent coordination by university personnel.

Overview

Only selected items' results will be reported for the overview section of the questionnaire. This is based on the fact that most items within this section did not focus on graduates' perceptions of their academic programs.

Alumni were asked if they considered their respective teacher education programs challenging. They were to circle one of three verbal options: 1) not at all challenging; 2) challenging; and 3) very challenging. Some respondents provided responses between those options; two graduates, in fact, drew a line and made an X or a ± between the verbal options. A mean was calculated for the responses, after the options were coded 1, 3, and 5, respectively, for increasing degrees of challenge.

A mean of 3.06 was obtained for this item assessing graduates' opinion on the extent to which their programs

were challenging. This should be interpreted with an awareness that the mid-point of this derived scale was not neutral, as had been the case in earlier sections of the instrument. From this information, therefore, one can state that the responding graduates, as a group, viewed their teacher education programs as challenging.

Graduates were asked to rate their academic advising. The response scale consisted of five verbal options: very good, good, acceptable, poor, and very poor. These options were coded from five to one, respectively. A mean of 3.40 was obtained, with a standard deviation of 1.10. Obtained frequency count for each of the response options was as follows: very good-24; good-33; acceptable-42; poor-21; very poor-5.

Results obtained on one additional item within the overview section will be described. Graduates were asked to compare their preparation for teaching with the preparation of other teachers with whom they are acquainted. With the verbal descriptor equal coded as 3, a mean of 3.64 was obtained for this item.

Summary

Data reported in this section of the report indicate that selected College of Education graduates appeared to perceive their professional preparation for teaching more positively than negatively. Means obtained for some of the foundations for teaching topics or skills reflect some weaknesses in this area. While four items' means exceeded

4.00 on the knowledge gained dimension, other means were below or very slightly above 3.00, mid-point of the response scale.

In addition, many respondents did not rate their knowledge equal to or greater than the need of particular knowledge or skills. This was most true for knowledge or skills that related to 1) discipline, 2) parent/teacher communications, and 3) motivating students.

Elementary education majors tended judge their specialization courses positively in the degree of personal abilities, instructional competence, and importance of the nine assessed subject areas. Mathematics and reading received the highest means on the instructional competence dimension. In spite of this, however, these were two of the four subjects, with language arts and social studies, for which need, or importance, of the competence was rated even higher than was the instructional competence. Five of the assessed subject areas, in fact, received means larger than 4.00 on the instructional competence mean and the lowest obtained mean was 3.20.

Results for secondary and K-12 majors were reported for only five of the nine specializations included in the participants' programs. The numbers of alumni returning completed questionnaires were few. Response mean (4.60) of English/language arts education alumni was higher for required courses within the College of Education than were the response means for their secondary and K-12 undergraduate

peers. Only social studies education majors reported data that yielded a mean (2.50) below 3.00 for this item. Required specialization courses outside the College of Education were similarly rated, with mathematics receiving a mean of 4.25, highest of those reported. Again, social studies received the lowest mean, 3.25.

Student teaching was deemed to be a very positive experience for most of the respondents. Means across this section of the survey instrument tended to be larger than those across any other section. Alumni expressed favorable opinions about the university coordinators, supervising teachers, and the length of both junior year student teaching and senior year student teaching.

Graduates rated their academic programs as challenging. When asked to compare their professional preparation with that of professional peers with whom they are acquainted, they rated their preparation better than equal and less than superior.

Academic advising was considered to have been acceptable or better by a large majority of the alumni. While 20.8% of the respondents rated this aspects of their undergraduate programs poor or very poor, 33.6% rated it acceptable, and the remaining 45.6% indicated their advising had been good or very good.

CHAPTER IV

CONCLUSIONS, DISCUSSION, AND SUGGESTIONS

This section of the report presents the study's conclusions and a discussion of factors that may have affected the study's results or that may have limited the study. Suggestions are also provided.

Conclusions

It is appropriate to conclude that alumni who participated in this study perceived their professional preparation as effective. These respondents received their teacher education training within ten academic majors in the College of Education, University of Central Florida. Each graduate had participated in a basic curriculum of foundations for teaching courses designed to meet state teacher certification requirements within the professional area. In addition, graduates had taken a required core of specialization courses within their respective programs of study and had participated in field-based student teaching.

Foundations for Teaching

Alumni rated skills, topics, and knowledge within the foundations for teaching area to have been effectively

conveyed and of value in their current teaching assignments. There was some variability within this area, but one can conclude that overall effectiveness was good. This conclusion is based on the fact that, with the exception of one topic, all foundations for teaching topics received a mean equal to or greater than 3.00, mid-point on the rating scale. The topics rated highest received means greater than 4.00. A few topics received means near mid-point of the scale, indicating a collective perception that the topics were perceived neither as strong nor weak, in the knowledge gained dimension.

Respondents generally rated the topics within the foundations for teaching section to have been useful. The level of usefulness varied, however. The topic rated most useful was motivating students, while the topic rated as least useful was patterns of school organization. It is concluded that, overall, graduates perceived the foundations area knowledge and skills to be of value in their teacher education programs.

Another measure of teacher preparation effectiveness was referred to in the study as know/need agreement. These data indicate that respondents felt their knowledge gained was not as strong as the usefulness dimension for two topics, especially, within the foundations for teaching area. One can conclude that graduates perceived the importance of classroom management and discipline and effective parent/-teacher communication to be greater than the knowledge

gained relative to the topics. This conclusion is based on two examinations of the data; comparison of group means and comparison of individuals' ratings concur and support the conclusion.

Elementary Education Specialization

One can conclude that the graduates from the elementary education program rated their specialization courses, in terms of instructional competence developed, quite strong. This was especially true of mathematics, reading, and language arts. In fact, each of the assessed nine subject areas received means greater than 3.00, mid-point of the scale.

Reading, mathematics, and language arts were rated most important by the graduates. Music was deemed least important, followed by health and physical education and art. These findings lead one to conclude that graduates considered the subjects to be of varied importance.

In spite of the fact that alumni means were highest for instructional competence in mathematics, this subject had the largest know/need discrepancy. The know/need discrepancy was also strong for social studies, reading, and language arts. One can conclude that, for some subject areas within the elementary education specialization, importance was greater than the instructional competence that graduates gained during their teacher education programs.

Secondary and K-12 Majors

Only five of the secondary and K-12 program alumni ratings were reported in the study's results. The reported results were described with the caveat that data were based on respondents' numbers that ranged from nine to five for the specializations.

With the exception of social studies, the reported specializations received means of 3.00 or greater for required College of Education courses. All specializations received means equal to or greater than 3.00 for required courses offered outside the College of Education. One can conclude that secondary and K-12 program graduates, for whom results are reported, rated their teacher education effective, with one exception. One can further conclude that, with a mean of 4.60, English/language arts majors considered their required College of Education courses to have been extremely effective.

Student Teaching

The graduates' field-based experiences were rated strongest of all the assessed areas. This was true for both the junior year student teaching and for the senior year student teaching. In addition to perceiving cooperating personnel positively, graduates overwhelmingly expressed the opinion that the lengths of the two field-based experiences were appropriate. Based on responses related to personnel, coordination, and duration, one can conclude that the student teaching experience was effective.

Overview

The questionnaire's final section contained items from which one can infer additional teacher education effectiveness measures. As a group, respondents considered their teacher education programs to have been challenging. When asked to compare their respective academic programs with those of their professional peers, respondents rated their preparation better than equal. A large majority of the alumni expressed the opinion that their academic advising had been acceptable, good, or very good. These findings further support the conclusion that University of Central Florida College of Education graduates, from the ten majors surveyed, considered their professional preparation to have been effective.

Discussion

The topics that were rated highest and lowest in the foundations for teaching section will be discussed in terms of related experiences graduates might have had and the nature of the items. These influences and others will be discussed as they relate to foundations courses, specialization courses, and student teaching experiences.

Foundations for Teaching

The topics that were rated strongest in terms of knowledge gained, in the foundation for teaching section, are topics that are reinforced or, perhaps more importantly, applied in subsequent courses and in student teaching. Learning objectives, instructional planning, and media resources,

specifically, are implemented or utilized in each of the specialization courses and, especially, in student teaching. In addition, student teachers have much exposure to their superiving teachers' utilization of this knowledge.

The topics that appear to be weakest, to the extent that graduates felt they gained knowledge commensurate with the importance of the topic, may relate to personality, interpersonal skills, or the abstract nature of the topics. The experience of the writer confirms that some student teachers do feel unsure of their abilities to maintain discipline and to communicate effectively with parents. Additionally, when problems have occurred in the past, resources on the university campus that might have strengthened the student teacher's skills in these areas have been lacking.

These occasions in the past, however, when student teachers have had really serious problems in the areas of discipline and parent/teacher communication, have often involved some problems in addition to the student teacher not having acquired knowledge about classroom management or parent/teacher communication. The student teacher, for example, may have been very poor at planning and organizing lessons or may have had difficulty establishing rapport with others. The topics within the foundations and specialization areas are not necessarily discrete entities; weakness in one topic may affect another topic or subject. These related factors may have affected graduates' responses.

Elementary Specialization

The specialization courses' importance ratings by the elementary education majors may have been affected by the extent to which classroom teachers generally assume instructional responsibility for each subject. It is the practice in many schools to have the children instructed by a subject specialist in art, music, or physical education. These three courses were deemed least important of the assessed subjects. On the other hand, strong accountability measures have been legislatively mandated in the specitic areas of reading and mathematics, the two subjects judged most important. Alumni ratings on the subject areas, therefore, may have been influenced by the responsibility classroom teachers must assume for each subject and the current emphasis on testing and accountability.

Study Limitations

It is interesting to consider the extent to which this study avoided the conditions on which earlier follow-up studies have been criticized. The questionnaires' low return rate was disappointing and leaves this project open to the charge that the respondents were not representative of the larger graduate pool.

A few of the respondents indicated they are not and have not been teaching. No effort was made to separate and tabulate their responses. It is unknown on what these graduates based their ratings for the importance or usefulness dimensions of the topics. In addition, it is unknown how

much knowledge or teaching proficiency alumni may have gained from graduate programs or from school district staff development activities. To the degree that this professional knowledge-base unknowingly influenced graduates' responses, along with possible nonrepresentativenss of the sample, the study is limited.

Follow-up studies have been criticized when anecdotal comments seem to overwhelm numerical data. If this criticism had not been encountered prior to the report's preparation, anecdotal comments would have been included. Now that data have been reviewed and results have been presented in an informal, unstructured manner it seems that the comments would detract from the results, since comments tended to be extremely positive or extremely negative. These comments, as a group, were not objective toward program effectiveness and, in fact, do not seem to contribute to the study without detailed interpretation.

Suggestions

Additional criticisms of follow-up studies have included lack of suggestions, absence of specific suggestions that can lead to program change and inclusion of generic, nebulous suggestions, and lack of suggestions that courses or topics be deleted from or de-emphasized within teacher education programs of study. With these potential faults in mind, suggestions will be made.

It is suggested that serious consideration be given to procedures, course content, or instructional emphasis

designed to increase graduates' effectiveness in classroom mangagement and discipline, parent/teacher communication, and motivating students. In spite of the fact that graduates rated social factors low on the importance dimension, it is the writer's opinion that teachers' knowledge of and, especially, sensitivity to societal and cultural diversities, play an important role in facilitating home/school cooperation; therefore, it is not suggested that these topics be omitted from the curriculum or receive less emphasis in the courses in which they are covered.

Similarly, improved understanding of children's home environment, community value systems, and psychological differences underlie teachers' abilities to motivate students, which further enable teachers to maintain classroom discipline. It is suggested that these topics perceived as less important in the foundations for teaching courses be related in ways that make them seem less abstract.

Students definitely have most opportunities to develop, reinforce, and apply these discipline, communication, and motivation skills in the school setting; students should, nonetheless, be provided in their campus courses with some of the growing body of knowledge related to these topics. Specific teacher behaviors, for example, have been found to positively correlate with improved classroom management, parent/teacher communication, and student motivation. Future teachers need to be aware of this knowledge. Topics and skills perceived as unimportant can be viewed as important

when students relate them to classroom practice and are aware that children, their actions, and their learning are strongly influenced by cultural and societal forces. Again, it is suggested that topics related to the sociological and psychological foundations for teaching be emphasized.

Subject areas perceived as less important in the elementary education specialization may be viewed as more important if they, too, are related to classroom practice. Combining courses into a humanities or applied arts block, for example, may lead students to realize that basic skills can be taught and reinforced in courses that don't necessarily address basic skills per se. More importantly, however, future teachers need to conceptualize the educational process as a composite of activities and interactions through which learners become thinking, appreciating, valuing human beings. The end goals of this process will not be reached with emphasis only on easily assessed instructional objectives.

In spite of the fact that state policy and district objectives focus on separate skills in the areas of reading and mathematics, future teachers do need to be aware that integrating curriculum areas can and will enhance and diversify learning opportunities. Children's literature, which was rated high in knowledge and need, for example, might be combined with content currently taught in art and or music. Each of these could be combined with reading or with mathematics with the additional goal that these two subjects be made even stronger to the extent that graduates gain

instructional competence.

It is further suggested that required courses in some of the secondary and K-12 specializations be examined. It may be desirable to restructure courses or alter course content in order that they become more effective.

Student teaching effectiveness was substantiated by the study's results. However, large variance characterized item responses within this area. This variability is based on the fact that a few personnel, both university and school-based, were perceived by graduates extremely negatively. It is suggested, therefore, that university coordination and teacher supervision be monitored and made more effective when weaknesses are found. This can result only when cooperative efforts actively and continuously involve all personnel, including university administrators, who deal directly and indirectly with this crucial professional development phase.

Closing Remarks

Conducting the study was an enlightening experience for the writer. Student teachers and graduates have often described their perceptions of their professional preparation negatively, and much media coverage has focused on weaknesses in teacher education. These communications tempt one to believe that professional efforts and monetary resources expended in Colleges of Education have been misdirected. These responding graduates of University of Central Florida's

teacher education programs, however, presented a view of their own professional preparation that is, overall, positive and supportive of continued adademic programs in this particular College of Education.

Who can better assess University of Central Florida's teacher education programs than its graduates?

APPENDIX

A FOLLOW-UP STUDY OF ELEMENTARY, SECONDARY, AND SELECTED K-12 EDUCATION GRADUATES OF THE UNIVERSITY OF CENTRAL FLORIDA

Dear Graduates,

We are conducting a study of graduates of selected U.C.F. education programs. Our purpose is to determine your opinion of your professional preparation. Information about your current position and future plans will make the data more valuable and will aid in program planning. Please be candid and complete in your responses. All information will be treated as confidential and only general conclusions representing group data will be reported. Thank you in advance for your time and careful consideration. Please return by the 25th of the current month.

Use the following scale for the ratings throughout this form: 1=very weak, very negative, or very unimportant; 2=weak, negative, or unimportant; 3=neither weak, negative, unimportant nor strong, positive, important; 4=strong, positive, or important; 5=very strong, very positive, or very important.

A. Foundations for Teaching

For each of the following topics, indicate in column (a) your perceived level of skill or understanding obtained during your teacher education program. Indicate in column (b) how useful or important each knowledge or skill area has proven to be in your teaching. Circle the appropriate numeral.

		Knowledge (a)					Usefulness (b)				
1.	The relationship between human growth and development and classroom learning	1	2	3	4	5	1	2	3	4	5
2.	Different theoretical models for understanding student behavior and improving classroom teaching	1	2	3	4	5	1	2	3	4	5
3.	Nature of the learning process	1	2	3	4	5	1	2	3	4	5
4.	Motivating students	1	2	3	4	5	1	2	3	4	5
5.	Techniques for effective classroom management and maintaining discipline	1	2	3	4	5	1	2	3	4	5
6.	Appropriate ethical behavior of teachers	1	2	3	4	5	1	2	3	4	5
7.	Understanding of exceptional students and methods to meet their special needs	1	2	3	4	5	1	2	3	4	5
8.	Professional rights and responsibilities of teachers	1	2	3	4	5	1	2	3	4	5
9.	Techniques that lead to effective parent/teacher communications	1	2	3	4	5	1	2	3	4	5
10.	Patterns of school organization	1	2	3	4	5	1	2	3	4	5
11.	Techniques for promoting effective reading in the content areas	1	2	3	4	5	1	2	3	4	5
12.	Media resources and their classroom use	1	2	3	4	5	1	2	3	4	5
13.	Instructional planning	1	2	3	4	5	1	2	3	4	5
14.	Identifying specific learning objectives	1	2	3	4	5	1	2	3	4	5
15.	Developing valid tests of student progress	1	2	3	4	5	1	2	3	4	5
16.	Using computers in the classroom	1	2	3	4	5	1	2	3	4	5
17.	The relationship between schools and society	1	2	3	4	5	1	2	3	4	5
18.	Different value-patterns of social-economic classes	1	2	3	4	5	1	2	3	4	5

B. Specialization Courses

1. Elementary Education Majors Only

For each of the following subject areas, rate your personal knowledge/abilities (a) and instructional competencies (b) at the conclusion of your teacher education program. In addition, rate the importance (c) of each subject area's course work, based on your teaching responsibilities. Circle NA (not applicable) if you did not complete course work in a particular area at U.C.F.

(Scale: 1 = very negative ... 5 = very positive)

		Personal (a)	Instructional (b)	Importance (c)
Art	NA	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
Health & Physical Education	NA	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
Literature for Children	NA	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
Language Arts	NA	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
Mathematics	NA	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
Music	NA	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
Reading	NA	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
Science	NA	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
Social Studies	NA	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5

2. Secondary and K-12 Subject Majors only:

Circle appropriate specialization: Science Foreign Language Vocational Education Art English/Language Arts Mathematics Social Science Business Speech

(Scale: 1 = very negative ... 5 = very positive)

Overall perception of special methods course(s) offered by the College of Education: 1 2 3 4 5

Overall perception of required specialization courses offered outside the College of Education: 1 2 3 4 5

List, if any, two required specialization courses offered outside the College of Education you feel were exceptionally beneficial in your teacher preparation program:

_____

_____

List, if any, two required specialization courses offered outside the College of Education you feel were of little or no benefit in your teacher preparation program:

_____

_____

3. Elementary, Secondary, and K-12 Subject Majors:

Based on your specialization course work, make any recommendations you feel would strengthen this phase of the teacher education program. (Attach a separate page if you wish.)_____

_____

_____

C. Student Teaching

Respond to the following items as they describe your student teaching experiences.
(Scale 1 = very negative ... 5 = very positive)

1. Junior Year Student Teaching

University Coordinator was -	
Available	1 2 3 4 5
Knowledgeable	1 2 3 4 5
Helpful	1 2 3 4 5
Supervising Teacher was -	
Available	1 2 3 4 5
Knowledgeable	1 2 3 4 5
Helpful	1 2 3 4 5
Coordination between concurrent course work on campus and school-based experiences	1 2 3 4 5
Overall evaluation of Junior Year Student Teaching	1 2 3 4 5

Amount of time required for JYST was (check one) too long____; appropriate____; too short____

2. Senior Year Student Teaching

University Coordinator was -	
Available	1 2 3 4 5
Knowledgeable	1 2 3 4 5
Helpful	1 2 3 4 5
Supervising Teacher was -	
Available	1 2 3 4 5
Knowledgeable	1 2 3 4 5
Helpful	1 2 3 4 5
Overall evaluation of Senior Year Student Teaching	1 2 3 4 5

Amount of time required for SYST was (check one) too long____ ; appropriate____; too short____.

3. Based on your student teaching experiences, make any recommendations you feel would strengthen this phase of U.C.F.'s teacher education program. (Attach a separate page if you wish.)

_____

_____

_____

_____

_____

D. Overview

Circle or write in responses on this page.

1. Teacher education programs have been criticized for not being academically challenging. Would you rate your program as:

not at all challenging challenging very challenging

2. How would you compare your preparation for teaching with the preparation of other teachers with whom you are acquainted? Your preparation is:

very inferior inferior equal superior very superior

3. How would you rate your academic advising?

very good good acceptable poor very poor

4. Are you currently teaching? yes no If yes, current grade assignment:_____; other_____.
Total years teaching experience:_____.
If you have not taught, would you briefly state the reason?_____

_____

If you taught one or more years and have left the profession, would you briefly state the reason?
_____
_____
Field of employment for which you left teaching:_____

5. Concerning advanced degrees -
Have you earned one? yes no If yes, what degree?_____; what major?_____.
Are you working on one? yes no If yes, what degree?_____; what major?_____.
If you answered no to both questions above, do you plan to begin advanced degree work within the next five years? yes no If yes, what degree?_____what major?_____
what institution?_____.

6. If you were entering college now, would you choose education as your career?

definitely not probably not unsure probably yes definitely yes

7. Some research has shown that academically talented college students are increasingly choosing careers other than teaching. Do you feel this is true? yes no If yes, do you have specific suggestions for improving this situation?_____

_____

_____

8. If an alumni advisory committee is formed in the future to advise on U.C.F. education program planning, would you be willing to attend infrequent, brief meetings while serving on such a committee? yes no
If yes, please give your current phone number_____.

9. (Optional) Name:_____

Address:_____

_____

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